

### **REMARKS**

Claims 1-42 are currently pending in the subject application and are presently under consideration. Claims 1, 30, 35, 39 and 42 have been amended as shown on pp. 2, 5, 7 and 8 of the Reply. The below comments present in greater detail distinctive features of applicants' claimed invention over the cited art that were conveyed to the Examiner over the telephone on August 20, 2007.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Objection of Claims 19-21 and 35**

Claims 19-21 and 35 are objected to because of the following informalities:

Claims 19-21 are objected to because they cannot be dependent on a system of components (software module) of claim 1. Claims 19-21 depend from independent claim 1. The components recited in independent claim 1 refer to a computer related entity, either hardware, a combination of hardware and software, software or software in execution, as indicated in the specification. (See page 9, lines 9-11). A server, email architecture or computer readable medium can have stored thereon a component as defined above. Thus, it is requested that this objection be withdrawn.

Claim 35 has been amended to correct the typographical error and thus, the objection should be withdrawn.

#### **II. Rejection of Claims 1-29 and 39-42 Under 35 U.S.C. §101**

Claims 1-29 and 39-42 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. This rejection should be withdrawn for at least the following reasons. The Federal Circuit has clearly established in *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338 (Fed. Cir. 2005) and *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) that inventions such as that claimed by applicant are statutory.

This court must also decide whether software code made in the United States and exported abroad is a "component of a patented invention" under 271(f)... Section 271(f) refers to "components of a patented invention."... Title 35, section 101, explains that an invention includes "any new and useful process, machine,

manufacture or composition of matter."... Without question, *software code alone qualifies as an invention eligible for patenting under these categories*, at least as processes. *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338 (Fed. Cir. 2005). (Emphasis added).

The Federal Circuit in *Eolas Techs., Inc. v. Microsoft Corp.* established that software code alone is statutory subject matter and thus patentable. In addition, independent claims 1 and 42, as amended recite *a computer implemented system*. A system by itself is statutory subject matter. By the standards set forth in the above decision, a computer implemented system in the form of software, hardware, or the combination of both clearly falls within the categories of statutory subject matter. Furthermore, the components recited in independent claim 1 refer to a computer related entity, either hardware, a combination of hardware and software, software or software in execution, as indicated in the specification and are non-abstract, statutory subject matter. (See page 9, lines 9-11).

Additionally, the subject claims clearly produce a useful, concrete and tangible result.

Because the claimed process applies the Boolean principle [abstract idea] *to produce a useful, concrete, tangible result* ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been *reduced to some practical application rendering it "useful."* *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

Independent claim 1 recites a component that produces a concrete, useful, and a tangible result in that it provides for identification of a subset of messages for further analysis.

Independent claim 42 recites the classification of received messages as good or spam which is also a useful, concrete and tangible result. Furthermore, independent claim 39 recites calculation of spam probability and recommendation of a quarantine time both of which are useful, concrete and tangible results.

In view of the above, it is readily apparent that the claimed invention as recited in independent claims 1, 39 and 42 (and associated dependent claims 2-29 and 40-41) reduces to a practical application that produces a useful, concrete, tangible result; therefore, pursuant to *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358 (Fed.Cir. 1999), the subject claims are directed to statutory subject matter pursuant to 35 U.S.C. §101. Accordingly, this rejection should be withdrawn.

### **III. Rejection of Claims 1-5, 8-12, and 16-42 Under 35 U.S.C. §102(e)**

Claims 1-5, 8-12, and 16-42 stand rejected under 35 U.S.C. §102(e) as being anticipated by Bandini, et al. (US Patent 7,117,358). This rejection should be withdrawn for at least the following reasons. Bandini, *et al.* does not disclose or suggest each and every aspect set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it *expressly or inherently describes each and every limitation set forth in the patent claim*. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The *identical invention must be shown in as complete detail as is contained in the ... claim*. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Applicants' claimed subject matter relates to systems and methods for identifying both legitimate and undesired information for spam prevention by delaying delivery of suspicious messages until further information can be gathered about the messages to facilitate classification of such messages. In particular, independent claims 1, 30, 39 and 42, as amended, recite similar aspects, namely, classification of a subset of messages *based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of*

*messages during the determined delay period.* Bandini, *et al.* does not teach or suggest these novel aspects.

Bandini, *et al.* relates to a system for filtering communication wherein the system monitors incoming messages and compares the messages to data from a SPAM database to determine if the incoming message is legitimate or not. The SPAM database is constructed by responding to a user or administrator indications as to whether received messages are spam or not. (See Abstract). If a comparison score, associated with a message and the SPAM database, is within a threshold range, the result is a borderline indication wherein the message is quarantined in a message store database and is examined by an administrator. (See column 4, lines 28-35). Bandini, *et al.* is silent with respect to determining a delay period and delaying an identified subset of messages such that one or more learning techniques are employed to receive additional data associated with the subset of messages during the delay period in order to automatically classify the messages.

Applicants' claimed subject matter, in contrast, provides for an intelligent quarantining system and method that facilitates a more robust classification system in connection with spam prevention. The method involves holding back some messages that appear to be questionable, suspicious, or untrustworthy from classification (as spam or good) and providing more time for a filter update to arrive with a more accurate classification. The suspicious messages can be quarantined for a *determined time period* to allow more data to be collected regarding these messages. A quarantine time can be determined based at least in part upon at least one of a probability (score) that the message is spam or the time of next filter update or the time of next filter download or a level of uncertainty. Alternatively or in addition, *m* quarantine times (aggressive, moderate, and/or conservative) can be passed into an API (application program interface). The recommendation as to whether to quarantine, and *how long*, can be informed by the values passed into the API. The (spam) filter can return information regarding whether a message is spam as well as whether the message should be quarantined – and including *how long* to quarantine the message. The recommended quarantine time could simply be based on the spam probability but other factors can be considered. (See page 23, line 18 to page 24, line 5). On page 7 of the Office Action, the Examiner incorrectly asserts that Bandini, *et al.* discloses a system or method to determine the length of delay. Bandini, *et al.*, merely quarantines messages

for review by an administrator but does not determine the quarantine time period after which the messages are classified.

Furthermore, applicants' subject claims recite classification of a subset of messages *based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period*. In particular, system feedback on the quarantined messages is collected. This can include data collected from monitoring at least a subset of messages in a quarantine folder for characteristics such as volume (low or high volume of message), similarity of message to other quarantined messages, and/or similarity of message to honeypot message. This information together with any available user feedback can be utilized by a filter update component as respective features (or training data) to train and update the filter(s). Following therefrom, updated filters can be generated. The quarantined messages can be, in substantial part, run through the updated filters to resume the classification process. (See page 15, lines 12-20). Bandini, *et al.* teaches delaying of suspicious messages for later review by an administrator but does not employ system information to classify quarantined messages after a delay period.

In view of at least the foregoing, it is readily apparent that Bandini, *et al.* does not anticipate or suggest the subject invention as recited in claims 1, 30, 39 and 42 (and claims 2-5, 8-12, 16-29, 31-38 and 40-41 that depend there from). Accordingly, it is respectfully requested that this rejection be withdrawn.

#### **IV. Rejection of Claims 6, 7 and 13-15 Under 35 U.S.C. §103(a)**

Claims 6, 7 and 13-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bandini, *et al.* in view of Lin (US Patent 7,051,077). This rejection should be respectfully withdrawn for least of the following reasons. Bandini, *et al.* alone or in combination with Lin does not teach or suggest each and every aspect of the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable

expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (emphasis added).

Applicants' claimed subject matter provides an intelligent quarantining system and method that facilitates classifying items in connection with spam prevention. In particular, independent claim 1, as amended, recites a second classification component that after *a determined* delay period classifies the subset of messages *based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period*. Bandini, *et al.* either alone or in combination with Lin, fails to teach or suggest this novel feature.

As discussed above, Bandini, *et al.* fails to teach or suggest classification of a subset of messages based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of messages during a determined delay period. Lin relates to a fuzzy logic voting method and system to classify emails. However, Lin is silent with respect to determination of a delay period as well as classification of a subset of messages based on learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period.

Bandini, *et al.*, alone or in combination with Lin, fails to teach or suggest all features of applicants' invention as recited in independent claim 1 (and claims 6-7 and 13-15 that depend therefrom), and thus fails to make obvious the subject claims. Accordingly, it is respectfully requested that this rejection be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP560US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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